

Operating Manual

Flow switch

as of version 1.0

FCM - 6 / - 3



WEEE-Reg.-Nr. DE 93889386

GREISINGER electronic GmbH

D - 93128 Regenstauf, Hans-Sachs-Straße 26

☎ +49 (0) 9402 / 9383-0 📠 +49 (0) 9402 / 9383-33 📧 info@greisinger.de

Index

1 GENERAL NOTE	2
2 SAFETY	2
2.1 INTENDED USE	2
2.2 SAFETY SIGNS AND SYMBOLS	2
2.3 SAFETY GUIDELINES.....	3
3 PRODUCT SPECIFICATION	3
3.1 SCOPE OF SUPPLY	3
3.2 OPERATION ADVICE	3
3.3 MOUNTING AND MAINTENANCE	3
4 DIMENSIONS	4
5 RESHIPMENT AND DISPOSAL	4
6 SPECIFICATION	4

1 General Note

Read this document carefully and get used to the operation of the device before you use it. Keep this document within easy reach near the device for consulting in case of doubt.

Mounting, start-up, operating, maintenance and removing from operation must be done by qualified, specially trained staff that have carefully read and understood this manual before starting any work.

The manufacturer will assume no liability or warranty in case of usage for other purpose than the intended one, ignoring this manual, operating by unqualified staff as well as unauthorized modifications to the device.

The manufacturer is not liable for any costs or damages incurred at the user or third parties because of the usage or application of this device, in particular in case of improper use of the device, misuse or malfunction of the connection or of the device.

The manufacturer is not liable for misprints.

2 Safety

2.1 Intended Use

FCM has been designed to offer a control against missing flow passage.

2.2 Safety signs and symbols

Warnings are labelled in this document with the followings signs:



Caution! This symbol warns of imminent danger, death, serious injuries and significant damage to property at non-observance.






Attention! This symbol warns of possible dangers or dangerous situations which can provoke damage to the device or environment at non-observance.



Note! This symbol point out processes which can indirectly influence operation or provoke unforeseen reactions at non-observance.

2.3 Safety guidelines

However, its trouble-free operation and reliability cannot be guaranteed unless the standard safety measures and special safety advises given in this manual will be adhered to when using the device.

1. Trouble-free operation and reliability of the device can only be guaranteed if the device is not subjected to any other climatic conditions than those stated under "Specification".
If the device is transported from a cold to a warm environment condensation may cause in a failure of the function. In such a case make sure the device temperature has adjusted to the ambient temperature before trying a new start-up.
2.  If there is a risk whatsoever involved in running it, the device has to be switched off immediately and to be marked accordingly to avoid re-starting.
Operator safety may be a risk if.
 - there is visible damage to the device.
 - the device is not working as specified.
 - the device has been stored under unsuitable conditions for a longer time.In case of doubt, please return device to manufacturer for repair or maintenance.
3.  Do not use these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury or material damage.
Failure to comply with these instructions could result in death or serious injury and material damage.
4.  This device must not be used at potentially explosive areas!
The usage of this device at potentially explosive areas increases danger of deflagration, explosion or fire due to sparking.

3 Product Specification

3.1 Scope of supply

- FCM flow switch
- Operating Manual

3.2 Operation advice

FCM flow switch has been designed to offer a very simple and safety control against the missing flow passage. The electrical components are separated from the mechanical parts and the reed contact is magnetically actuated. The switch head is fixed to the body by a fast self locking system and can be replaced without removing the flow switch from the pipe.

No adjustment or setting is required after the switch head replacement.

- No setting required
- Easy and fast replacement of the switch head
- Low pressure loss
- Horizontal and vertical mounting
- Liquid and gas applications

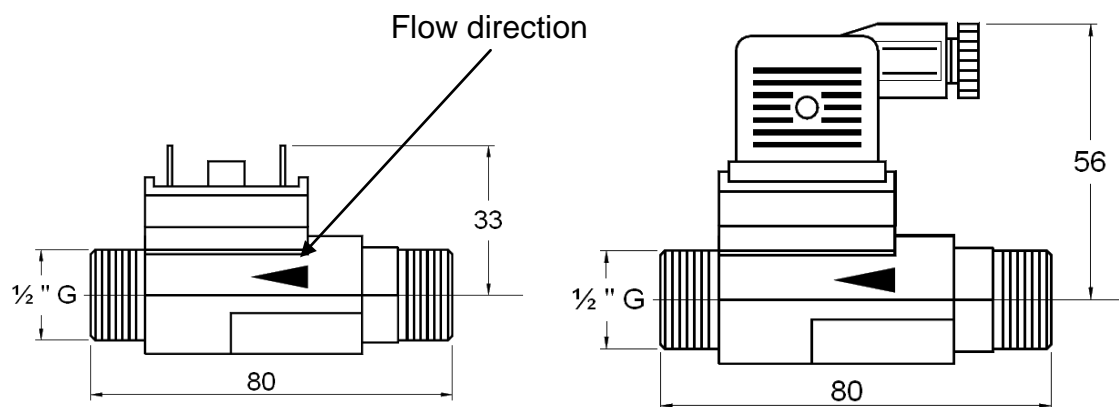
3.3 Mounting and Maintenance

Clean the hydraulic circuit before installation of the flow switch.

Do not mount the flow switch in direct contact with ferrous or magnetic surfaces. Take care to use metal hexagonal part of the body during connection to the pipe adaptors.

If switch head has to be replaced, be sure of the good fastening to the body.

4 Dimensions



5 Reshipment and Disposal

5.1 Reshipment



All devices returned to the manufacturer have to be free of any residual of measuring media and/or other hazardous substances. Measuring residuals at housing or sensor may be a risk for persons or environment.



Use an adequate transport package for reshipment, especially for fully functional devices. Please make sure that the device is protected in the package by enough packing materials.

5.2 Disposal



The device must not be disposed in the unsorted municipal waste! Send the device directly to us (sufficiently stamped), if it should be disposed. We will dispose the device appropriate and environmentally sound.

6 Specification

Body	Brass		
Process connection	G ½ "		
Sensing element (Piston)	Polypropylen		
Accuracy	± 15 %		
Temperature max.	90 °C		
Pressure loss	0.5 bar at max. Flow rate		
Flow rate max.	25 l/min, for all settings		
Weight	170 g		
Reed contact	N.O. / No flow condition		
Contact rating	70 VA, max. 0.5 A, max. 300V		
Wiring	Angel plug		
Protection class	IP65		
Mounting	Horizontal or Vertical with flow direction from the bottom		
Set point l/min	Nominal	ON	OFF
FCM - 6	2.5	2.8	1.7
FCM - 3	6	6.3	4.1